

**UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW JERSEY**

PPG INDUSTRIES, INC.,

Plaintiff,

v.

UNITED STATES OF AMERICA, et
al.,

Defendants.

Civil Action No.
2:12-cv-03526 (JMV)(MAH)

**MEMORANDUM OF LAW IN SUPPORT OF
PLAINTIFF PPG INDUSTRIES, INC.'S MOTION
FOR SUMMARY JUDGMENT**

RETURN DATE: MAY 7, 2018

LECLAIRRYAN

A Virginia Professional Corporation

Joseph F. Lagrotteria, Esq.

One Riverfront Plaza

1037 Raymond Blvd., Sixteenth Floor

Newark, New Jersey 07102

(973) 491-3600

Attorneys for Plaintiff-Counterclaim

Defendant, PPG Industries, Inc.

TABLE OF CONTENTS

PRELIMINARY STATEMENT	1
FACTUAL BACKGROUND	2
I. NPR and its Chromium Processing Plant.....	2
II. PPG’s Purchase of the Chromium Plant.....	4
III. The Government Controlled NPR and the Chromium Chemicals Industry’s Operations during the Wars.	5
a. The Chromium Chemicals Industry.	5
b. Government’s Control of Pricing of Raw Material and End Products.	6
c. The Government also Controlled the Supply of Raw Materials to NPR.	11
d. The Government Controlled the Chrome Industry’s Labor Force.....	14
e. The Government Entered into Supply Contracts with NPR.	16
f. The Government Controlled NPR’s Process to Produce Chromium Chemicals by Subsidizing NPR’s Operations.....	17
g. The Government’s Modification of NPR’s Process Resulted in Increased Waste Generation and the Toxicity of such Waste.....	23
IV. The Government Arranged for the Disposal of Waste at NPR’s Plant During the Wars.	25
a. The Government Increased NPR’s Waste Generation and Influenced the Decision Making Process of NPR’s Waste Generation and Disposal.	25
b. The Government Controlled NPR’s Process which Increased NPR’s Waste at the Sites.	28
c. The Government Provided NPR with a Subsidy.	29

V.	PPG’s Regulatory Responses to the Contamination on the Sites and Compliance with the National Contingency Plan (NCP).....	31
	PROCEDURAL HISTORY.....	35
	ARGUMENT	36
I.	PPG is Entitled to Summary Judgment against the Government on its Affirmative Claim and Relative to the Government’s Counterclaim.	36
II.	The United States is Liable Pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).....	38
A.	The Sites are a Facility under CERCLA.	41
B.	There has been a Release of Hazardous Substances at the “Facility.”	41
C.	The Government is an “Operator” under CERCLA.	43
D.	The Government is an “Arranger” under CERCLA.	48
E.	PPG has Incurred Response Costs that are Consistent with the National Contingency Plan.....	54
a.	PPG has substantially complied with the relevant provisions of the NCP, including 40 C.F.R. § 300.700(c)(5) which concerns voluntary, private remediating parties, such as PPG.	57
b.	PPG has substantially complied with Paragraph 6 of the NCP (40 C.F.R. § 300.700(c)(6)).	59
III.	The Government is also Liable Pursuant to the Resource Conservation and Recovery Act.	62
IV.	The Government’s Counterclaim Should also be Dismissed on Summary Judgment.....	68
	CONCLUSION	70

TABLE OF AUTHORITIES

Cases

<i>Am. Int’l Specialty Lines Ins. Co. v. United States</i> , 2010 WL 2635768 at *20 (C.D. Cal. June 30, 2010).....	40
<i>Anderson v Liberty Lobby, Inc.</i> , 477 U.S. 242 (1986)	36
<i>Aviall Services, Inc. v. Cooper Industries, LLC</i> , 572 F. Supp. 2d 676 (N.D. Tex. 2008).....	60, 61
<i>Bd. of County Com’rs of County of La Plata, Colorado v. Brown Group Retail, Inc.</i> , 768 F. Supp. 2d 1092 (D. Colo. 2011)	60
<i>Bowen Eng’g v. Estate of Reeve</i> , 799 F. Supp. 467 (D.N.J. 1992), <i>aff’d</i> , 19 F.3d 642 (3d Cir. 1994).....	38
<i>Brewer v. Quaker State Oil Ref. Corp.</i> , 72 F.3d 326 (3d Cir. 1995)	36
<i>Burlington N. & Santa Fe Ry. Co. v. United States</i> , 556 U.S. 599 (2009)	39, 50
<i>Cadillac Fairview/California, Inc. v. Dow Chemical Co.</i> , 299 F.3d 1019 (9 th Cir. 2002)	51, 52
<i>Celotext v. Catrett</i> , 477 U.S. 317 (1986)	37
<i>FMC Corp. v. U.S. Dep’t of Commerce</i> , 29 F.3d 833 (3d Cir. 1994)	43, 44, 45, 47
<i>Franklin County Convention Facilities Auth. v. Am. Premier Underwriters, Inc.</i> , 240 F.3d 534 (6th Cir. 2001)	40, 43
<i>Hatco Corp. v. W.R. Grace & Co. Conn.</i> , 849 F. Supp. 931 (D.N.J. 1994).....	55, 56, 57, 58
<i>Interfaith Cmty Org. v. Honeywell Int’l, Inc.</i> , 399 F.3d 248 (3d Cir. 2005)	63, 64, 65
<i>Litgo N.J., Inc. v. Bob Martin, et al.</i> 2010 WL 2400388 (D.N.J. June 10, 2010)	52, 53, 66, 67
<i>Litgo New Jersey Inc. v. Comm’r New Jersey Dep’t of Env’tl. Prot.</i> , 725 F.3d 369 (3d Cir. 2013)	passim

<i>Meghrig v. KFC Western, Inc.</i> ,	
516 U.S. 479 (1996)	65
<i>New Jersey Turnpike Auth. v. PPG Indus., Inc.</i> ,	
197 F.3d 96 (3d Cir. 1999)	39
<i>Niagara Mohawk Power Corp. v. Chevron USA, Inc.</i> ,	
596 F.3d 112 (2d Cir. 2010)	40, 43
<i>PPG Industries, Inc. v. USA</i> ,	
2:12-CV-0352 (KM)(MF) (October 31, 2012).....	1
<i>Prudential Ins. Co. v. United States Gypsum Co.</i> ,	
711 F.Supp 1244 (D.N.J. 1989).....	53, 67
<i>Tosco Corp. v. Koch Indus., Inc.</i> ,	
216 F.3d 886 (10 th Cir. 2000)	40
<i>United States v. Atl. Research Corp.</i> ,	
551 U.S. 128 (2007)	69
<i>United States v. Bestfoods</i> ,	
524 U.S. 51 (1998)	47
<i>United States v. Cornell-Dubilier Elecs., Inc.</i> , No. 12-5407 JLL, 2014 WL	
4978635, at *8 (D.N.J. Oct. 3, 2014)	39, 47
<i>United States v. Kramer</i> ,	
644 F. Supp. 2d 479 (D.N.J. 2008).....	56
<i>United States v. Premises Known as 717 South Woodward Street, Allentown, Pa.</i> ,	
2 F.3d 529 (3d Cir. 1993)	37
<i>United States v. Price</i> ,	
688 F.2d 204	64
<i>Virginia St. Fidelco, L.L.C. v. Orbis Prod. Corp.</i> ,	
2016 WL 4150747, at *4 (D.N.J. Aug. 3, 2016).....	50, 51

Statutes

42 U.S.C. § 6901	62
42 U.S.C. § 6903	63, 64
42 U.S.C. § 6972	62
42 U.S.C. § 9601	42
42 U.S.C. § 9607	39, 50

Rules

Fed. R. Civ. P. 30	30
Fed. R. Civ. P. 56	36, 37

Regulations

40 C.F.R. § 300.150	57
40 C.F.R. § 300.155	59
40 C.F.R. § 300.160	57, 59
40 C.F.R. § 300.400	57
40 C.F.R. § 300.405	57
40 C.F.R. § 300.410	57
40 C.F.R. § 300.415	57, 59
40 C.F.R. § 300.420	57
40 C.F.R. § 300.430	57, 59
40 C.F.R. § 300.435	57, 59
40 C.F.R. § 300.700	54, 55, 57, 59
40 C.F.R. § 302.4	41, 42
55 Fed. Reg. 8666	54
55 Fed. Reg. 8793	55
55 Fed. Reg. 8795	61

PRELIMINARY STATEMENT

This case involves the United States Government's (Government) obligation to contribute to Plaintiff PPG's remediation efforts at certain properties¹ located in Jersey City, New Jersey, under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Resource Conservation and Recovery Act (RCRA). During World War I (WWI), and World War II (WWII) (collectively, the Wars) the Government exercised significant control over the former Natural Products Refining Company's (NPR) Chromium Processing Plant, and the waste that the Plant generated. PPG purchased the NPR Plant in 1954 and operated it until 1963. The Government's pervasive control, which it exercised over the NPR Plant, as well as the chromium chemicals industry as a whole, subjects it to CERCLA operator and arranger liability, as well as liability under RCRA.

¹ Specifically, the Sites at issue in this case, include those known as Hudson County Chromate Sites 114, 132, 133, 135, 137, 143, 186, 121, 202, and 207 located in Jersey City, New Jersey. PPG operated a chromium process plant at Site 114, subsequent to operations conducted by NPR and the Government. In addition, PPG has had to perform response actions related to chromium contamination off-site at the following related nearby properties: the Ten West Property (800 Garfield Avenue), Fishbein property (816 Garfield Avenue), Forrest Street Avenue Properties (86/90-100 Forrest Street), and Halstead (78-104 Halladay Street) located in Jersey City, New Jersey. *See* Complaint, *PPG Industries, Inc. v. USA*, 2:12-CV-0352 (KM)(MF) (October 31, 2012). PPG also remediated a property located near Caven Point Road, following a detection of hexavalent chromium above the NJDEP's interim Chromium Soil Cleanup Criteria (CrSSC) (collectively, the properties are referred to as "the Sites").

Based upon historic facts and associated documentary records, summary judgment should be granted in PPG's favor. The Government must be required to reimburse PPG an allocated percentage of the cleanup costs for the Sites² that it has incurred to remediate chromate chemical processing waste (CCPW), associated hexavalent chromium, and other contaminants at the Sites. Accordingly, PPG's Motion for Summary Judgment should be granted and the Government's Counterclaim dismissed.

FACTUAL BACKGROUND

I. NPR and its Chromium Processing Plant.

NPR, incorporated in 1909, constructed a chromite ore processing plant at 902 Garfield Avenue in Jersey City, New Jersey and filed for its first trademark related to potassium bichromate in January, 1910. Plaintiff's Statement of Undisputed Facts (SOF) ¶¶ 3, 7. NPR began operations in 1910. *Id.* Before WWI, NPR maintained a single manufacturing building that produced its primary product, potassium bichromate, as well as a secondary product, sodium bichromate. SOF ¶ 5.

NPR's initial production plant utilized manually operated coal-fired reverberatory furnaces to conduct chromite ore roasting to produce chromium

² This Motion solely pertains to the threshold issue of liability, as is customary in CERCLA practice. Issues involving allocation must be determined at a subsequent hearing.

chemicals. SOF ¶ 8. NPR utilized a chromite ore conversion process that consisted of several steps to manufacture these chromium chemicals. SOF ¶ 9. First, the ore was ground into a fine powder. *Id.* Second, sodium carbonate (soda ash) was mixed with the powdered ore and fused at high temperatures under oxidizing condition in furnaces or rotary kilns to convert the chromium to water soluble sodium chromite. *Id.* Third, the fused sodium chromate was leached from the roasted ore. *Id.* This process created a residue (“mud” or “sludge”) that was typically and partially recycled to a roaster while the remainder (“waste”) was stockpiled on-Site. *Id.* This waste contained hexavalent chromium and other hazardous substances. *Id.* Fourth, the sodium chromate was then concentrated and acidified with sulfuric acid, precipitating sodium sulfate. *Id.* The sodium sulfate was then cooled, crystallizing sodium bichromate which was then dried and either packaged or chemically converted to other chemical forms for sale. *Id.*

After the outbreak of WWI, the supply of German produced potassium chloride, a material deemed critical for the domestic war effort, was halted. This created a large demand for sodium bichromate. SOF ¶ 10. Thus, NPR modified its operation to primarily produce sodium bichromate during and after WWI. *Id.*

In 1930, NPR applied for a patent to process chromium chemicals using a rotary kiln. SOF ¶ 11. This Patent was ultimately granted in March of 1933. *Id.* In the Patent, NPR described several modifications which were made to its process.

SOF ¶ 12. One such modification included the reworking of the waste residue through a second leach process which yielded the recovery of 90-95% of the chromic oxide present in the ore, with three-fourths of the recovery coming from the first leach and roast process. *Id.* The Patent also described an alternative method which obviated the reworking process, with greater amounts of lime and soda ash being added, which yielded a lower, 60%-70% chrome chemical recovery. *Id.* The alternative method described in the Patent were used by NPR during WWII, when the Government demanded that NPR increase its production. SOF ¶ 13. As part of the Government's demand, the Government subsidized the change in NPR's production process, thereby eliminating the rework of the waste residue, increasing the waste residue stream, as well as the levels of hexavalent chromium in it. SOF ¶ 13.

II. PPG's Purchase of the Chromium Plant.

In July 1954, PPG and NPR entered into an asset purchase transaction under which PPG purchased the NPR Plant and commenced operations of the Plant beginning July 20, 1954. SOF ¶¶ 14-15. The Government has failed to rebut this fact.

PPG utilized a manufacturing process similar to NPR's peacetime production, namely manufacturing steps which involved reworking ore so as to not produce as much waste residue as the process previously mandated to NPR by the

Government. SOF ¶ 16. After evaluations in 1960 concluded that the Jersey City Plant could not be economically expanded, PPG opted to build a new chromium plant in Corpus Christi, Texas. SOF ¶ 17. PPG's Texas Plant began operations in or about June 1962 and produced both chromium chemicals and pigments. *Id.* The Jersey City Plant ceased operations in June 1963 and PPG sold the facility's property, buildings, and equipment in 1964. SOF ¶ 18.

PPG is currently remediating the Sites under a 2009 Partial Consent Judgment and a 1990 Administrative Consent Order and has spent over \$360 million dollars, through December 2015, doing so. SOF ¶¶ 141-147. PPG is still incurring substantial costs to complete the remediation of the soil and groundwater at the Sites and will continue to incur such costs in the future.³

III. The Government Controlled NPR and the Chromium Chemicals Industry's Operations during the Wars.

a. The Chromium Chemicals Industry.

The size and production capacity of plants manufacturing chrome chemicals in the United States remained largely unchanged from the early 20th century into the mid-1950s. The industry consisted of only five (5) producers which operated a total of six (6) plants. SOF ¶ 19. The largest producer, Mutual Chemical Company, maintained production plants in Baltimore, Maryland and Jersey City, New Jersey.

³ See Chromiumcleanup.com (2018). *Chromium Cleanup Partnership* [online] Available at: <http://www.chromiumcleanup.com/> (last accessed 25 February 2018).

SOF ¶ 20. The remaining four (4) plants, in order of production capacity consisted of Diamond Alkali, NPR, Martin Dennis Company of Newark, and Imperial Color and Paper Company. *Id.* These five (5) companies comprised all of the United States’ domestic production of chrome chemicals – for both Government and civilian consumption during the Wars. SOF ¶ 21. While small, this was a critical and vitally important wartime industry. In fact, during WWII, the Government designated chrome chemicals a critical war materiel⁴ and stressed the importance of primary chrome chemicals, noting that they were used in many industries involving pigments, leather tanning, chromium plating, textiles, copper, brass and steel, chemicals, dyes and intermediates, “ ... each of which in a large measure is directly necessary to the war effort.” SOF ¶ 22.

b. Government’s Control of Pricing of Raw Material and End Products.

During WWI, the Government controlled pricing for all domestic manufacture of war materiel, including chrome chemicals. One method by which the Government exerted this control was through its War Industries Board (WIB), which fixed all prices for materials used in the chromium industry, under the guise of “voluntary” pricing, which was accomplished by the threat of plant seizure authorized by the Defense Act of 1916. SOF ¶¶ 23-24. The Defense Act of 1916

⁴ The term “materiel” refers to those products manufactured for direct military or other war use by the Government, *see* Oxford Dictionary definition: “military materials and equipment.”

authorized Government seizure of manufacturing plants which did not comply with the Government's directives. SOF ¶ 24.

In 1918, Mr. Bernard Baruch was appointed by Woodrow Wilson to serve as the chairman of the WIB. SOF ¶ 25. With his leadership, the WIB successfully managed the Government's economic mobilization during WWI by controlling raw materials, manufacturing facilities, and the distribution of various products of industry. SOF ¶ 25-27. The sole objective of the WIB was to convert industries from peace-time production to provide essential war-time output. *Id.* Industries that produced essential war materials, such as chromium chemicals, were placed on "preference lists," and prices were fixed by the Government to prevent competitive bidding, thereby affording greater control to the WIB to control those industries. *Id.*

Following the end of WWI, the Government began a program of mobilization to prepare for future wars. SOF ¶ 28. Mr. Baruch's programs from WWI were included in this mobilization plan and Mr. Baruch frequently lectured at the Army War College on the Government's control and management of industry in the production of war materiel. SOF ¶ 29. In his lectures, Mr. Baruch described the creation of a governmental "quasi-judicial body" which was largely comprised of Army and Navy officers and created a system to enforce price fixing, which did not take "... as long as courts to secure action." *Id.*

Mr. Baruch acknowledged that, contrary to the rights afforded to contractors under the Constitution, the Government's War Industries Board fixed prices for goods and labor that "...were not fair." SOF ¶ 30. The Government developed the aforementioned scheme labeled by Mr. Baruch as "voluntary prices," where the threat of plant commandeering by the Government was made clear to each contractor that if they were to consider ignoring or refusing to heed the Government's demands. *See* SOF ¶ 23, 28-31. Mr. Baruch also revealed, through his lectures, that if any contractor thought to create a written record that "...under duress he had been forced to do this [follow the Government's demands]... it would have been a very serious question." SOF ¶ 31.

In January 1941, the Government established the Office of Production Management (OPM) which began actively assessing the Government's war materiel needs. SOF ¶ 33. The Reconstruction Finance Corporation (RFC), created by President Roosevelt in 1932, was tasked in 1938 as the Government's wartime "bank" to award loans for industrial plant expansions. SOF ¶ 32. Upon the United States' entry into WWII following the December 7, 1941 Japanese attack on Pearl Harbor, military demands for munitions and goods greatly increased, including the demand for chromium products. SOF ¶¶ 34, 36.

The War Production Board (WPB) was authorized to replicate the role of the WIB during WWI, and created subdivisions such as Industry Advisory Committees

made up of WPB members, military officers, and industry representatives to control the pricing, production, allocation and supply of raw materials and finished products. SOF ¶ 36. War emergency agencies were also established and included the Metals Reserve Company (MRC), the Office of Price Administration (OPA), and the Defense Supplies Corporation (DSC). SOF ¶ 35.

Chromium ore and chrome chemicals remained in the forefront of critical and essential materials for War production as they had been during WWI. SOF ¶¶ 10, 34. In the beginning of WWII, the Government categorized chromium under full priority control, citing in support of its action that: (1) the government stockpile was insufficient; (ii) consumption was increasing, and (iii) increased pressure on shipping space could restrict imports. SOF ¶ 34.

Thus, primary chromium chemicals played a critical role in producing a wide range of military components. SOF ¶ 37. For example, chromium-containing paints produced during 1941 were valued at \$800 million and tanned leather materials utilizing chromium tanning agents were valued at \$500 million in 1942. *Id.* The Government noted that “the importance of chromium chemicals is far greater than and can hardly be measured by pounds or pounds sold.” SOF ¶ 38.

On behalf of the Government, the OPA and MRC raised the cost of chromium ore to the producers, established a ceiling price and kept the prices at the ceiling rate throughout the War. SOF ¶ 40. The Government also dictated the price

NPR could sell its product for and kept such pricing low and stagnant even though production demands steadily increased. SOF ¶¶ 43, 46. Thus, the Government directly controlled the profits that NPR could realize.

In November 1942, Maximum Price Regulation 258 (“MPR 258”) was issued by the OPA, giving the MRC, a Government agency, authority to set chrome ore prices up to the established maximum ceiling rate. SOF ¶ 39. The MRC immediately raised the price of chrome ore by \$2.00 per ton. SOF ¶¶ 40-41. The Government was now the only source of chrome ore, having purchased all available ore and prohibiting private industry imports, thereby giving the producers no choice but to buy from the Government. SOF ¶ 42.

MPR 258 simultaneously froze all prices of commodities so that chrome producers, including NPR, were not allowed to increase their product prices to adjust for increases in raw materials and operating costs. SOF ¶ 43. In fact, the MRC had suffered substantial losses on its subsidy of domestic Montana chrome ores, arbitrarily using the OPA recommended ceiling price for Transvaal ore in order to gain significant profits from ore sales to the chrome chemicals producers. SOF ¶ 44. MRC deliberately set out to garner profit from industry in order to obtain compensation for those losses. SOF ¶ 44. The five (5) chromium chemical producers received no relief from the MRC’s mandated price for its ore. SOF ¶¶ 47-48

By mid-1943, the MRC reduced the price of chrome ore by \$2.00 per ton, yet it simultaneously applied a third amendment to OPA's MPR 258, which allowed MRC to add freight charges for shipment of chromium ore to chrome producers from the Government stockpile, thereby nullifying the benefit to the chrome producers of the \$2.00 per ton reduction. SOF ¶ 45.

As noted above, the chromium producers – including NPR - could only purchase ore from the Government. SOF ¶ 42. The Government ignored the chromium producers' protests that all other production costs had risen sharply since the Government froze its product prices in 1941. SOF ¶ 46. As a result of this price manipulation, the MRC effectively made the ceiling price the floor, and generated a profit for the Government, despite the fact that "MRC's function of protecting the strategic and essential material position of this country does not require them to make a profit." SOF ¶ 47. NPR could not recover from its wartime losses following the end of WWII as the Government continued with its chrome chemicals product pricing and export controls into 1946. SOF ¶ 48.

c. The Government also Controlled the Supply of Raw Materials to NPR.

Government demand for chromium chemicals drastically increased during the Wars. WWI began on July 28, 1914. SOF ¶ 49. At that time, the Government supplied necessary war materials to Allies, including chromium chemicals produced by NPR. *Id.* The chrome chemicals industry, including NPR, required

chromite ore imported from foreign countries. SOF ¶ 50. But, almost immediately after WWI began there was a concern that the supply of chromite ore and other raw materials would be cut off by shipment embargoes. *Id.* The Government subsequently requisitioned shipments of imported chrome ore from South Africa and New Caledonia for war service. SOF ¶ 51.

The Government's State Department, as early as 1914, began requesting exports of chromium ore from New Caledonia to NPR to prevent the shutdown of chromium chemical production. SOF ¶ 52. As a result, NPR was able to continue operations, and to expand its chromium chemicals processing plant in 1915 to meet the European Allies' wartime needs. SOF ¶ 53. In fact, the Government's greatly increased production demands necessitated NPR's purchase of land for waste disposal in 1915. SOF ¶ 109.

During the first half of 1918, the chrome chemicals industry had consumed 13,256 tons of ore containing 55% chromium. SOF ¶ 54. The Government estimated that approximately 20,000 long tons of chromite ore would be required to meet the increased demand for chromium chemicals for the remainder of 1918; this raised additional concerns over ore shortages. SOF ¶ 54.

In 1934, the Government's Joint Board of the Army and Navy recommended that the Government establish a stock pile reserve of nine strategic materials. SOF ¶ 55. Chromite ore was the second highest priority material and required the

second highest procurement volume. SOF ¶ 57. Subsequently, Congress approved \$3.5 million for stockpiling of those nine strategic materials, including chromium, in 1937. SOF ¶ 56.

In May 1941, the Government, through the MRC, removed 100,000 tons of Transvaal ore from the market, with the Government also making shipments of this ore a priority, leaving chrome chemicals producers with no other source but the Government for the supply of this raw material. SOF ¶ 58. The Government controlled all chromium ore supplies in the United States, selling to NPR under the WPB's "M" Order regulations. SOF ¶ 59.

During WWII, the Government also supplied and arranged for the transportation of soda ash, an essential raw material for the chromium chemicals producers. SOF ¶ 60. The Government exerted its control over the supply of soda ash to meet the steadily increasing demands for chrome chemicals. SOF ¶ 61. The Government's control continued until at least into the summer of 1945, providing soda ash to the chrome chemicals industry to avert shortages. SOF ¶ 62. At one point, the shortage of soda ash caused a suspension of operations at NPR. SOF ¶ 63. However, the Government's WPB frequently assisted with respect to the supply of soda ash, utilizing its Transportation Unit to deliver directly to the chrome plants and to avert plant shutdowns. SOF ¶ 64. For example, the WPB reported shipments of 19 carloads of soda ash in 1945 to NPR and the other

chromium chemicals producers. SOF ¶ 65.

As a result of a strike at one soda ash supplier, the WPB arranged for shipments from Detroit and from other locations “... to prevent any curtailment of chrome chemical production.” SOF ¶ 66. Several rail embargoes and box car shortages affected deliveries of soda ash, with WPB once again stepping in to provide supplies of the critical raw material to NPR and the other chrome producers. SOF ¶ 67. Accordingly, to ensure the unimpeded production of chromium chemicals, the Government controlled every aspect of the production process, starting with the delivery of raw materials to NPR and the other chromium chemicals producers.

d. The Government Controlled the Chrome Industry’s Labor Force.

In April 1918, President Wilson established the National War Labor Board (NWLB) to prevent war-time labor disputes from disrupting military production. SOF ¶ 68. As explained above, Mr. Bernard Baruch acknowledged that the Government set unfair fixed labor prices during WWI. SOF ¶¶ 30-31. The NWLB extended the Government’s control over wartime industry to expressly include such labor issues. SOF ¶¶ 68-69.

Government wartime agencies took control and corrective action on any labor issue which threatened to halt or slow war production. For example, the Government asserted its ultimate authority in commandeering the Diamond Alkali

plant (which was twenty percent of the chromium industry) when a strike shutdown the plant. SOF ¶ 69. Thus, this small industry comprised of only five (5) members were directly affected by the threat of and actual Government takeover by the military.

In the preface to the Army's official history account titled "[t]he Emergency Operation of Private Industries during WWII" it is noted that, "the War Department's seizure of plants idled by or threatened with labor unrest or management noncompliance with federal policies developed into a major U.S. Army domestic function" SOF ¶ 70. The Government used this threat, as aptly described by Mr. Baruch during his post-WWI lectures, to place enormous pressure on the chromium producers to "volunteer" their participation in the Government's "requests." *See, e.g.*, SOF ¶¶ 29-31.

For example, during WWII, the chromium producers were suffering steadily increasing operating costs while the Government forced them to keep their product prices at 1941 rates. SOF ¶71. Additionally, the Government, through the WPB and other agencies curtailed the threats of labor strikes at the chromium producers by having its military and wartime agencies force the producers to accept employees' increased wage demands. SOF ¶ 72. As with the Diamond takeover, the Government intervened in the chromium producers labor issues when a chromium plant shutdown was either threatened or imminent. *See* SOF ¶¶ 69, 72.

In March 1944, NPR's union withdrew a complaint filed with the War Labor Board (WLB) after having received its requested employee wage increases. SOF ¶ 75. With the threat of a strike at NPR, the WPB had a representative of its Chemical Bureau of Labor participate in the case. SOF ¶ 73. Following a demand from the Mutual Chemical Company's union for a wage increase "...across the board," the WPB noted that the "...War Manpower Commission (WMC), Army and Navy have indicated willingness to join the WPB in certifying the wage case against Mutual with the WLB. This should assure its approval." SOF ¶ 76. Thus, the Government directly managed labor disputes occurring at the chromium plants, including the setting of wages paid to NPR employees, which continued post-WWII.

The Government also directly oversaw the labor force of the chrome producers and ensured that the plants had adequate labor. For example, the Government sent field inspectors to evaluate NPR's labor issues and assured NPR that the Government would provide the workers necessary to meet mandated production quotas. SOF ¶ 74. The Government also commissioned a 1943 Public Health Service Report to address labor issues and to maintain production at levels acceptable to the Government. SOF ¶ 77.

e. The Government Entered into Supply Contracts with NPR.

NPR also had product supply contracts with the Government. SOF ¶ 78. In

1942, approximately 18 million pounds of bichromates were exported by Mutual Chemical, Prior Chemical Corporation [Diamond Alkali], NPR and Martin Dennis, with approximately half going directly to the Lend-Lease program via Treasury Department procurement contracts. SOF ¶ 79. The Lend-Lease Program was enacted by President Roosevelt in March of 1941 to assist the Government's Allies with necessary war materiel and supplies prior to the Government's entry into WWII. SOF ¶ 80.

However, the Government had already begun controlling the export of chrome chemicals products in 1940. SOF ¶ 81. NPR was expressly included in the Government's list of "major war supply contracts" relative to a Lend-Lease contract between NPR and the Government's Treasury Department. SOF ¶ 82.

f. The Government Controlled NPR's Process to Produce Chromium Chemicals by Subsidizing NPR's Operations.

The Government controlled NPR and the chrome chemicals manufacturing process by determining the grade and quality of ore made available by the Government to the producers during the Wars. SOF ¶ 83. The chrome chemicals producers were pressed into military supply contracts as the Government utilized its wartime controls over chrome ore, including what was referred to as Transvaal B grade chemical chrome ore. *Id.*

The Government's mandate for NPR to increase its production was evidenced by process changes which are documented by the WPB as early as

January 1944. SOF ¶ 84. NPR's production for the Government was increased though the implementation of an alternative manufacturing process studied by NPR following the installation of rotary kilns as described in a 1933 patent. *Id.* Several process modifications were described in a patent filed by NPR, which included the reworking of waste residue through a second leach process and recovery of 90-95% of the chromic oxide present in the ore, with three-fourths of the recovery coming from the first leach and roast process while the second process obviated the rework, adding greater amounts of lime and soda ash for a 60%-70% recovery. SOF ¶ 12.

The second process change described in the patent is identical to the method previously described by the WPB. SOF ¶¶ 12, 84. And thus, the Government acknowledged, that NPR was the most likely candidate to receive a subsidy involving the push-through of only virgin ore using the method described by the Government's WPB. SOF ¶ 84.

The Government held a meeting on February 7, 1944, where they addressed the increasing chrome chemicals shortage due to ore supplies and increased war production demands. SOF ¶ 85. Production costs had increased 30% since 1941, labor shortages were frequent, and no additional source of production existed. *Id.* In fact, one of the five producers warned of a complete shutdown if it did not receive any assistance or relief. SOF ¶ 86.

Faced with this situation, the Government determined that the best method of increasing output was to alter the normal sodium bichromate production process by pushing through only virgin ore and eliminating the reworking of mud, thus decreasing chrome recovery rates while increasing production volume. SOF ¶ 87. This reduced chrome recovery from the ore from an 85% average when it was reworked, to 60% when it was not reworked and "...would leave a probably marketable sludge which under usual conditions is recycled back into the process. Under the proposed scheme [the sludge] would be stockpiled for the present. Thus 40% to 50% more output could be secured." *Id.*

Potential chromium industry subsidies were also considered by the Government, and "[p]ossibly the Army and Navy could subsidize the job, as 85% of the product is for military use." SOF ¶ 88. The WPB needed increased output from all chrome chemicals producers to meet the military's increased demands, making Army and Navy support through a monetary or raw material supply subsidy a practical consideration. SOF ¶ 89. Although MRC and DSC expressed doubt about such an approach, the Army or Navy subsidy option was not ruled out. *Id.* Immediate inspections of all chromium plants were scheduled by the Government in order to "...get all the facts." *Id.*

On February 9, 1944 the WPB acknowledged that Government ore prices had gone up considerably, the Government's 1941 freeze on product prices

remained – producers were under their ore usage quotas set by the Government to meet increased military production requirements. SOF ¶ 90. It was again considered the best option by WPB officials to,

... increase the throughput of ore with the objective of stepping up bichromate production to meet your goals, but without regard to normal economics of recovering the maximum chrome value from its ores yielding a sludge relatively high in chrome compared to normal sludge discarded at bichromate plants ... one company ... thought it might be possible to take the sludge, sell it and get sufficient revenue to make up for this uneconomic, wasteful practice and utilize the sludge for an end product having a commercial outlet. You could stockpile the sludge at the plant and when the war is over stop buying on some definite schedule. It may have some resale value.⁵

SOF ¶ 91 (emphasis added). One WPB member asked, “How would you stockpile something like that?” SOF ¶ 92. Another responded, “I would expect it would be outdoor storage – no other practical way...we want about a 10 percent overall increase in production.” *Id.* (emphasis added).

At that same meeting the Government also discussed production problems which were compounded by labor issues as some chromium industry employees were now working as much as seventy (70) hours per week. SOF ¶ 93. This caused additional strain on the producers’ costs for overtime pay, while the Government did not permit price increases for finished products. *Id.*

⁵ *Id.*

Increased bichromate production was critical to the Government because of the War. And thus, the proposed Government subsidy plan became two-pronged: 1) a higher grade Russian ore would be supplied in enough quantities to increase production by 800,000 pounds per month; and, 2) waste sludge would be purchased from production operations to eliminate the rework of chrome ore and increase production by an additional 800,000 pounds per month. SOF ¶ 94. Military representatives consulted at the time were doubtful that these subsidies would be approved by the Government and instead demanded complete curtailment of civilian allocation of any chrome chemicals. SOF ¶ 95.

When the Government conducted its plant visits in early March 1944, NPR was confident in its ability to increase production by as much as 500,000 pounds per month of sodium bichromate if its normal production process were altered to eliminate the reworking of the recycled mud, without installing any new equipment. SOF ¶ 96. However, NPR would need compensation for the increased sludge generated. *Id.* The Government's need for unprecedented product volumes caused the generation of massive waste piles at NPR's facility as high as seventy (70) feet, visible for miles and impossible to overlook. SOF ¶ 116.

The Government, specifically, the WPB, was doubtful that use of the high-grade Russian ore at NPR would increase production. SOF ¶ 96. The Government noted at the time of their March 1944 plant visits that NPR was operating at a loss,

and therefore considered the rework elimination process change as the only method for increased production at NPR's Plant. *Id.*

By August of 1944, shipping problems of ore increased which included a rail embargo, causing all new shipments of Transvaal ore to cease. SOF ¶ 97. This further complicated efforts to increase production. *Id.* In late August 1944, the WPB drafted a schedule of anticipated shipments to the chrome producers of both Transvaal and higher grade ore following the recent discussion and submission of the subsidy plan proposals by the WPB. SOF ¶ 98. This schedule shows NPR is the only producer scheduled to receive only Transvaal ore from July to December of 1944, while all other producers were scheduled to receive stocks of higher grade Russian, Turkish or domestic ores. *Id.* This proves the Government's two-pronged subsidy plan, was being implemented: four producers would be attempting to increase production via the subsidized purchase of high-grade ores, while the fifth producer – NPR – would increase production by at least 500,000 pounds per month through the modified and wasteful processing of chromium ore without reworking the waste mud. *See, e.g.*, SOF ¶¶ 99, 104, 126.

In fact, NPR was successful in its efforts to meet the Government's increased production demands by implementing the change in its process to eliminate the reworking of ore, thereby creating more waste sludge. *Id.* In December 1944, the WPB prepared a report on consumption of chromite ore by

chrome chemicals producers based upon the usage quotas established, and noted that “...Natural Products was the only one that exceeded its quota.” SOF ¶ 100. In reporting on the status of all subsidies for metals in minerals in December 1944, the WPB indicated that the chrome chemicals program was “almost entirely subsidized.” SOF ¶ 101.

The chromium producers’ production problems continued into 1945 following the 1944 subsidy program. SOF ¶ 102. The program was almost entirely unsuccessful, with general production losses of between 7 and 10 percent experienced by the four chromium producers that used Russian ore. *Id.*

The chrome chemicals producers suffered significant financial losses into the Korean War, with the Government in 1952 demanding that chrome chemicals producers sell their ore inventory in excess of six months’ supply back to the Government at cost in exchange for poor quality, lower grade ores stockpiled by the Government during WWII which did not meet their specifications in order to increase the Government’s stockpile of Transvaal grade ore. SOF ¶ 103. NPR’s financial issues lead the company to sell its plant to PPG one year after the Korean War’s end. SOF ¶ 14.

g. The Government’s Modification of NPR’s Process Resulted in Increased Waste Generation and the Toxicity of such Waste.

The Government’s control over the NPR Plant included the implementation of significant process changes. These process changes, namely the direction to

cease reworking waste mud and instead push through virgin ore, lead to a vast increase in the amount, and toxicity of waste product disposed of at the NPR Plant Sites. The Government was acutely aware of the increased waste mud generation resulting from increased production at the plants, particularly with respect to the process change at NPR. SOF ¶ 104.

The WPB proposed the purchase of approximately 4,000 tons per month of a sludge "...containing approximately 12% Cr_2O_3 at approximately \$5.00 per net ton delivered to dump. [T]his would merely off-set the cost arising from inefficient extraction of ore and would in no way increase Natural's present profits or reduce any losses they are now sustaining." SOF ¶ 105. This was the Government's chosen method of disposal for this waste sludge. SOF ¶ 106. In fact, in 1947 the Government noted the importance of the waste disposal parcel at the Martin Dennis plant in its assessment of Government property for sale at the facility. *Id.* Handwritten notes indicate, "[U]n-developed part (not in leasehold)...used by MD as a waste dump and will continue to be needed by anyone producing bichromates (*sic*)." *Id.*

In 1952, NPR identified two types of waste available to the City of Jersey City: one was known as NPR's "normal stock"; the other, referred to as "fines" was, "...sandy-like in consistency because of added lime which washes it

finer than usual stock. It is about 55% iron oxide (?) (*sic*) insoluble chrome and lime.” SOF ¶107.

IV. The Government Arranged for the Disposal of Waste at NPR’s Plant During the Wars.

The Government’s control over raw materials and its finished products during the Wars caused an increase in the generation of wastes at the Sites. SOF ¶ 108. WWI forced NPR to change its primary product from potassium bichromate to sodium bichromate, and the greatly increased production demands of the WWI necessitated NPR’s purchase of land for waste disposal in 1915. SOF ¶ 109. WWII’s demand for chrome chemicals eclipsed the WWI requirements and the process change directives issued by the Government generated a much larger volume of waste that contained higher levels of hexavalent chromium, which was then disposed of by the Government at its chosen storage location, NPR’s facility. SOF ¶ 110.

a. The Government Increased NPR’s Waste Generation and Influenced the Decision Making Process of NPR’s Waste Generation and Disposal.

Because of the Government’s coercion over NPR to produce more chromium products through specific manufacturing processes, there was an increase in the generation of waste disposed of at the Sites. SOF ¶ 111. The Government, by its control of the entire chrome chemicals industry, from pricing and allocation of raw materials, production volumes, increased waste production

and increased waste disposed of at the Sites, caused the generation and disposal of waste chromium mud at NPR's Plant. SOF ¶ 112.

The Government was fully aware of the waste generation inherent in the chrome chemicals process, directed studies of the process, controlled the producers and their profits and pricing of the finished products. SOF ¶ 113. The Government was also fully aware of its effect on the health of workers, and even acknowledged that such health effects made it difficult to staff the chrome industry. SOF ¶ 114. The Government even visited the plants in order to determine how best to increase production for the Government's benefit. For example, the OPA visited NPR's plant in mid-1943: "On a recent visit to one of the producers (Natural Products Refining Company), a number of shipping invoices, representing all sales made for a period of six months, was studied. All indicated definite defense use." SOF ¶ 115. NPR's production for the Wars, far greater than its normal, peacetime production, caused the generation of waste mud piles over seventy (70) feet high. SOF ¶ 116.

NPR continued production for the Government after WWII, and the waste mud piles remained onsite. SOF ¶ 117. NPR could not recover from its wartime losses following the end of WWII as the United States continued with its chrome chemicals product pricing and export controls into 1946. *Id.*

The Army's "secret" emergency program managed by the Army Corps of

Engineers revealed post-war as the Manhattan Project, required sodium bichromate. SOF ¶ 118. This requirement greatly added to the military's allocation demands for sodium bichromate beginning in 1943 but as the Cold War progressed the demands increased. *Id.* For example, between March and April of 1946 the United States stockpile sold over \$3.6 million pounds of chrome ore to NPR. SOF ¶ 119. These reports also prove that NPR received more ore than reported on the contracts located in the National Archives as additional sales of chrome ore continued under the same contract numbers issued during WWII. SOF ¶ 120.

The Government and civilian war organizations knew that the generation of waste sludge was inherent in the primary chromium chemicals manufacturing processes the Government was forcing NPR to use, and that those production sludges were discarded at the plants. SOF ¶ 121.

When representatives of those Governmental organizations visited NPR's facility, the presence and magnitude of the waste piles could not be overlooked as documented in the oblique aerial photographs of the Sites. SOF ¶ 122. Additionally, it was evident to these representatives that any increase in sludge production would require the waste to be stored outdoors. SOF ¶ 123. The Government took no action to prevent this increased waste stockpiling or offer alternatives and most likely purchased the waste as part of its subsidy arrangement. SOF ¶ 123. Moreover, it directed and guided actions that resulted in NPR's waste

disposal practice. *Id.*

b. The Government Controlled NPR's Process which Increased NPR's Waste at the Sites.

The Government through its military and civilian war agencies, maintained day-to-day supervision and control of the totality of NPR's operations. The Pentagon in 1944 "suggested" that the Army's autonomous branch, Army Service Forces ("ASF"), make all effort to increase NPR's operations from six to seven days a week, wishing also to be informed of any progress made to accomplish this change. SOF ¶ 124. The Government invariably used terminology such as "desire" and "suggest" in making its demands, but these were unmistakable orders from the military to make every effort to accomplish its goals by whatever means possible.

These efforts were detailed in a memorandum summarizing visits made by the ASF to the chrome chemicals plants during February 1944. SOF ¶ 125. NPR advised the ASF they could not find additional labor but were they able, they could not afford to operate on a seven-day schedule due to the OPA's ceiling price controls, advising that the additional day would increase production by 300,000 pounds per month, and increase by 500,000 pounds per month would be possible "...by wasteful use of chromite ore without expenditure for additional plant facilities..." SOF ¶ 126.

c. The Government Provided NPR with a Subsidy.

NPR was not a participant in the WWII high-grade ore subsidy provided by the DSC. SOF ¶ 127. It instead increased production by eliminating its rework of waste mud, causing much greater volumes of higher toxicity waste which was ultimately disposed of by the Government on-Site. *Id.* NPR's ore consumption and production volumes during the high-grade ore subsidy period support the successful application of the Government's alternative plan to increase production by altering NPR's normal production process. SOF ¶¶ 12, 84-101.

NPR's production modification is also supported by physical evidence through the use of aerial photographs. SOF ¶ 128. For example, a string of mud transport carts located just south of the production buildings appear in a July 1, 1944, aerial photograph. *Id.* Years later, these carts were followed by a light toned pile of material in the same configuration as the string of carts. SOF ¶ 129. This light toned pile is consistent with the requisite use of large amounts of lime necessary in the roasting process when reworking does not occur, and supported by the production of the light gray and green mud during a former period of NPR operations as reported in the PPG production research reports. SOF ¶ 130.

The Government will no doubt argue that there are some information gaps that do not definitely support PPG's position on these issues. However, the Government's own Rule 30(b)(6) and expert witnesses have acknowledged that

many Government documents related to this matter have been destroyed under established protocols. SOF ¶ 131. Following WWII, the entire set of records on the sodium bichromate subsidy program in DSC's files was ordered to be destroyed by the RFC in 1949. SOF ¶ 132.

In fact, Government experts further admit that the absence of a document in its archives does not mean the document does not exist. SOF ¶ 133. Therefore, logical inferences must be made in order to determine the most likely sequence of events based upon the existing contemporary evidence and available information.

Subsidies to the chromium chemicals industry for high-grade ore and the process modification eliminating rework of process mud were both discussed and planned for by the Government. Minimal documentation exists on the high-grade ore subsidy where four of the five producers save for NPR were participants. The Government's expert, as well as its 30(b)(6) witness, Dr. Brigham, stated during his 30(b)(6) testimony that there was no evidence the process modification to eliminate rework of mud and the generation of more waste did not happen. SOF ¶ 134. Specifically, Dr. Brigham testified:

Q: Do you know whether there was another or different type of subsidy program proposed for Natural Products Refining?

A. There was another subsidy program proposed regarding the purchase of the mud.

Q. Sludge?

A. Sludge/mud, COPR, that was discussed, but that never went through.

Q. When you say it never went through, were there any documents in the documents we produced or the Government produced that said we're not going to do this or it's not going to happen?

A. I believe there are no documents that say this did not occur.⁶

Id. Notwithstanding his sworn testimony as a 30(b)(6) witness, Dr. Brigham, when acting as the Government's expert witness, maintains that the lack of documentation regarding the sludge purchase existing today is evidence that it did not occur.

V. PPG's Regulatory Responses to the Contamination on the Sites and Compliance with the National Contingency Plan (NCP).

PPG commenced operations of the plant beginning on or about July 20, 1954 until 1963, a period spanning only nine (9) years, as compared to the Government and NPR's operation of fifty (50) years. SOF ¶¶ 7, 14, 18. The relatively short peacetime period of PPG's operations is dwarfed by the numerous decades that NPR conducted Site operations and when the Government exerted control over manufacturing and waste handling at the Plant. Despite this, PPG has been engaged in the cleanup of the Sites, at a cost of over three hundred and sixty million dollars through December 2015⁷ and is continuing to incur substantial cleanup costs for the remediation of soil and groundwater. SOF ¶ 147.

In May of 1982 PPG was notified by Mr. Aldredge of the City of Jersey City

⁶ 30(b)(6) Testimony of Jay Brigham, PhD, 6/26/16 at 164:1-21 (emphasis added).

⁷ See October 2016 Expert Report of Ray Dovell.

that the Sites, "... may be a danger to the public health, safety and welfare." SOF ¶ 135. After communications between PPG and Mr. Aldredge, PPG acknowledged on July 9, 1982 that chromium chemicals process residues remained on its former Plant site. SOF ¶ 136. By this same correspondence PPG also notified New Jersey Department of Environmental Protection (NJDEP) and the United States Environmental Protection Agency (EPA) of the presence of chromium process residues. *Id.* PPG conducted an initial investigation which revealed high levels of hexavalent chromium concentrations in the soil and water, which PPG sent to NJDEP. SOF ¶ 137. PPG conducted further sampling to quantify and assess the contamination at the Sites. SOF ¶ 139. Since the initial confirmation of the existence of contamination remaining on the Sites, PPG has engaged in numerous investigations, removal and response actions, which have revealed that the chromium wastes and associated contaminants exceeded New Jersey cleanup standards. SOF ¶ 140.

The NJDEP issued directives for the remediation of the Sites, which culminated in the entry of an Administrative Consent Order concerning the Sites in 1990 and a Partial Consent Judgment to complete Site remediation efforts entered in 2009. SOF ¶ 141. Additionally, in January 2009, the Natural Resources Defense Council ("NRDC"), a local group the Interfaith Community Organization ("ICO"), and later GRACO filed a federal lawsuit to secure a defined cleanup plan with

stricter cleanup standards that could be enforced by a federal court, specifically pressing PPG to excavate and remove all the chromium-contaminated waste, soil, and groundwater in the area, among other requirements. SOF ¶ 142. A consent decree providing this level of specificity was signed in April of 2011. *Id.* PPG has, and continues to remediate the Sites under these governing documents as well as per the direct oversight of the NJDEP. SOF ¶ 143.

In completing its numerous soil and groundwater investigations, removal and remedial actions, PPG has substantially complied with the National Contingency Plan. PPG has performed multiple response actions, including but not limited to interim remedial measures (IRMs) in the 1990s at the Garfield Avenue Sites; 2004-2005 emergency groundwater pumping activities; and the July 2010-June 2011 IRM #1 at Site 114. SOF ¶ 144. PPG's actions were directed and approved by the NJDEP, and were guided by the JCO and ACO. *Id.*

PPG also worked over the course of many years to develop a Feasibility Study, which upon direction of the State of New Jersey was never finalized, moving in 2010 to the remediation alternative preferred by the State and the Public, the excavation of impacted soils and other contaminated media. SOF ¶ 145. The final excavation remedy selected for soils protected human health and the environment by removing all accessible CCPW and soil with contaminant concentrations that exceeded health-based standards. *Id.*

Further, PPG has kept an accurate account of the work performed at the Sites by submitting remedial investigation reports, remedial action work plans, progress reports and other technical documents to the NJDEP for comment and approval-all of which document the work performed by PPG at the Sites. SOF ¶ 146. Through December 2015, PPG has incurred approximately \$361 million dollars remediating the Sites. SOF ¶ 147. PPG has further maintained an accurate accounting of costs incurred by PPG. *Id.*

PPG has also substantially complied with the public participation requirement of the NCP. The NJDEP has had direct oversight over all of PPG's work at the Sites. SOF ¶ 148. In fact, the NJDEP actively oversaw all aspects of PPG's work and had ultimate authority for all regulatory decisions. *Id.* The NJDEP's active oversight of PPG's work continues to this day and will continue in the future until PPG has completed all needed work. *Id.*

Further, the NJDEP was not the only public entity involved in reviewing and commenting on PPG's proposed and implemented response actions. Jersey City reviewed and continues to review PPG's plans, provided comments on them to PPG and the NJDEP, actively monitored PPG's implementation of the actions, and exercised its independent authority over PPG's actions. SOF ¶ 149. Jersey City's role in reviewing and commenting on PPG's work was formalized in the JCO. *Id.*

As part of this role, the city is “responsible for representing the interests of the City, including its residents.” SOF ¶ 150.

Detailed documentation of PPG’s investigations, remedial and removal actions were maintained by both the NJDEP and PPG. In addition, the NJDEP maintained a public website for the chromium sites, while the PPG and the Site Administrator operated a website dedicated to the cleanup project - posting public notices, including scheduling numerous public participation meetings⁸, proposed work, submissions to the NJDEP and work completion and milestones. PPG also maintains a document repository in Jersey City which is open to the public for in-person review. SOF ¶ 152. Public notices of proposed work were published in local newspapers. SOF ¶ 153. The NJDEP also took control of public notice responsibilities, taking the lead in requesting public comment and setting public comment periods for both the ACO and JCO. SOF ¶ 154.

Given the above, PPG has performed its response actions consistent with the NCP. *See* Cert. of Joseph F. Lagrotteria, Esq. ¶ 105, October 7, 2016, Expert Report of Steven Johnson, P.E., at 43-44.

PROCEDURAL HISTORY

⁸ *See* nj.gov.com (2018) *NJDEP Site Remediation Program* [online] Available at: <http://www.state.nj.us/dep/srp/siteinfo/chrome/bkgrnd.htm>, (last accessed 25 February 2018); November 23, 2009, City Hall, Public Meeting; December 17, 2009 Health Studies Public Meeting at NJCU; December 21, 2009 Public Meeting; January 27, 2011 Public Meeting; March 3, 2011 Public Meeting; November 1, 2011.

PPG filed its Complaint against the Government in this matter on June 12, 2012. PPG filed an Amended Complaint on October 31, 2012. The Government filed its Answer and Counterclaim against PPG on December 19, 2012. PPG answered the Government's Counterclaim on January 7, 2013. Pursuant to the Court's Fifth Amended Pretrial Schedule Order (D.E. 130) fact and expert discovery are closed.

ARGUMENT

I. PPG is Entitled to Summary Judgment against the Government on its Affirmative Claim and Relative to the Government's Counterclaim.

Summary judgment is appropriate when the record “shows that there is no genuine issue as to any material fact and the movant is entitled to judgment as a matter of law.” Fed.R.Civ.P. 56(a). In deciding whether there is a disputed issue of material fact, the threshold inquiry is whether there are “any genuine factual issues that properly can be resolved only by a finder of fact because they may reasonably be resolved in favor of either party.” *Anderson v Liberty Lobby, Inc.*, 477 U.S. 242, 250 (1986); *Brewer v. Quaker State Oil Ref. Corp.*, 72 F.3d 326, 329–30 (3d Cir. 1995) (citations omitted).

While “entitled to the benefit of all justifiable inferences from the evidence, the nonmoving party may not, in the face of a showing of a lack of a genuine issue, withstand summary judgment by resting on mere allegations or denials in the

pleadings; rather, that party must set forth ‘specific facts showing that there is a genuine issue for trial,’ else summary judgment, ‘if appropriate,’ will be entered.” *United States v. Premises Known as 717 South Woodward Street, Allentown, Pa.*, 2 F.3d 529, 533 (3d Cir. 1993) (citations omitted). As the United States Supreme Court has explained:

Rule 56(c) mandates the entry of summary judgment, after adequate time for discovery and upon motion, against a party who fails to make a showing sufficient to establish the existence of an element essential to that party's case, and on which that party will bear the burden of proof at trial. In such a situation, there can be no genuine issue as to any material fact, since a complete failure of proof concerning an essential element of the nonmoving party's case necessarily renders all other facts immaterial.

Celotext v. Catrett, 477 U.S. 317, 322-23 (1986) (internal quotations and citations omitted).

In this case, there are no genuine issues of material fact to thwart summary judgment in PPG’s favor. The Government, through its control over the chromium industry and NPR’s chromium processing plant during World War I and II is an operator and an arranger under CERCLA. The Government controlled the entirety of the chromium industry, including NPR, during the Wars by controlling the supply of raw materials, controlling NPR’s end use of its products, and altering NPR’s process resulting in an increased generation of waste that was stored on the Sites causing contamination. Similarly, the United States is also liable under RCRA. The storage of chromium wastes on the Sites led to an imminent and

substantial endangerment that is currently being remediated solely by PPG in compliance NCP.

As there are no valid issues of material fact relative to these points, summary judgment must be granted in PPG's favor, and an order compelling the Government to contribute to the clean-up costs to remediate the Sites must be entered.

II. The United States is Liable Pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

In the Third Circuit, “[l]iability under CERCLA is to be liberally applied.” *Bowen Eng’g v. Estate of Reeve*, 799 F. Supp. 467, 475 (D.N.J. 1992), *aff’d*, 19 F.3d 642 (3d Cir. 1994). As discussed within, the Government qualifies as both an operator and as an arranger under CERCLA, requiring it to contribute to the clean up of chromium wastes and other hazardous substances that were discharged at the Sites.

Congress enacted CERCLA to “promote the timely cleanup of hazardous waste sites and to ensure that the costs of such cleanup efforts were borne by those responsible for the contamination.” *Burlington N. & Santa Fe Ry. Co. v. United States*, 556 U.S. 599, 602 (2009) (internal quotation marks omitted). To accomplish this goal, CERCLA gives private parties the right to recover costs incurred in cleaning up a waste site from “potentially responsible parties”

(PRPs)—four broad classes of persons who may be held strictly liable for releases of hazardous substances that occur at a facility. *Id.* at 608-09; *see also Litgo New Jersey Inc. v. Comm'r New Jersey Dep't of Env'tl. Prot.*, 725 F.3d 369, 378 (3d Cir. 2013).

CERCLA liability against the Government is appropriate because the evidence and testimony reflect the following four elements:

- (1) the Site is a “facility”;
- (2) the Government falls within one of the four classes of “responsible persons” listed in § 9607(a);
- (3) there has been a “release” or “threatened release” of hazardous substances at the Site; and
- (4) the release or threatened release has required or will require PPG to incur “response costs” that are consistent with the National Contingency Plan.

See 42 U.S.C. § 9607(a); *see also New Jersey Turnpike Auth. v. PPG Indus., Inc.*, 197 F.3d 96, 103-4 (3d Cir. 1999).

It is important to note that “‘CERCLA liability may be inferred from the totality of the circumstances; it need not be proven by direct evidence.’ Particularly in cases where the issues date back to the 1940s and direct evidence is rare, the Court must rely upon circumstantial evidence.” *United States v. Cornell-Dubilier Elecs., Inc.*, No. 12-5407 JLL, 2014 WL 4978635, at *8 (D.N.J. Oct. 3, 2014) (*citing Tosco Corp. v. Koch Indus., Inc.*, 216 F.3d 886, 892 (10th Cir. 2000)). This must be the case, especially here where the Government has admitted destroying

documents and that, because of the destruction of those documents, it cannot be concluded that additional documents supporting PPG's claims never existed. SOF ¶¶ 131-134. The fact that the passage of time, and its impact on available evidence, must be taken into account has been recognized by multiple courts, for instance:

In situations like the present case, the type of evidence, be it direct or circumstantial, and its quality, is to some degree impeded by the passage of time and the lack of business records reflecting the day-to-day operations of the industries then present at the ... Site. The available evidence of who did what at the relevant site is often dependent on inference.

Niagara Mohawk Power Corp. v. Chevron USA, Inc., 596 F.3d 112, 131 (2d Cir. 2010). Accordingly, it has been held that:

[w]hen determining CERCLA liability, "there is nothing objectionable in basing findings solely on circumstantial evidence, especially where the passage of time has made direct evidence difficult or impossible to obtain."

Id. (quoting *Franklin County Convention Facilities Auth. v. Am. Premier Underwriters, Inc.*, 240 F.3d 534, 547 (6th Cir. 2001); see also *Am. Int'l Specialty Lines Ins. Co. v. United States*, 2010 WL 2635768 at *20 (C.D. Cal. June 30, 2010).

PPG meets each of the CERCLA elements relative to the Government and there are no issues of material fact precluding a finding of the Government's liability. Accordingly, summary judgment is appropriate and must be granted.

A. The Sites are a Facility under CERCLA.

The Sites qualify as a “Facility” under CERCLA. CERCLA broadly defines “Facility” as: (A) any building, structure, installation, equipment, pipe or pipeline (including any pipe into a sewer or publicly owned treatment works), well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, or aircraft, or (B) any site or area where a hazardous substance has been deposited, stored, disposed of, or placed, or otherwise come to be located. *Litgo, supra*, 725 F.3d at 383.

The Sites at issue include the former NPR chromium chemicals Plant located on Garfield Avenue in Jersey City, New Jersey as well as surrounding properties which were used both for operations as well as waste storage. SOF ¶ 4. NPR’s Plant and the land beneath and surrounding it, is an area where “hazardous substance(s)” have been deposited, stored, [and] disposed of. SOF ¶¶ 137, 140.

B. There has been a Release of Hazardous Substances at the “Facility.”

Chromate chemical processing waste (CCPW) and its related chemical compounds are hazardous substances, including hexavalent chromium, which were released at the Sites. The Code of Federal Regulations, at 40 C.F.R. § 302.4 (“Designation of Hazardous Substances”) includes a listing of designated hazardous substances and also specifies that “unlisted” substances are considered hazardous if they meet certain criteria. Both chromium and chromium compounds

are expressly listed as “hazardous substances” within 40 C.F.R. § 302.4. Chromium compounds, including hexavalent chromium and CCPW, are the contaminants driving the remediation costs at the Sites.

The requisite “release” of these hazardous substances occurred at the Sites.

CERCLA defines “release,” in relevant part, as follows:

[A]ny spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any hazardous substance or pollutant or contaminant) ...

42 U.S.C. § 9601(22).

PPG and the Government agree that chromium compounds were released from NPR’s former chromium chemicals manufacturing plant at the Sites into the surrounding groundwater and soils. *See* the Government’s December 19, 2012, Counterclaim, ECF 19 at ¶ 15; *see also* SOF ¶ 140. PPG has been investigating and remediating these hazardous substances in both soil and groundwater at the Sites and has incurred approximately \$361 million dollars in response costs through December 2015, and continues to incur response costs to date. SOF ¶ 147. PPG has satisfied this CERCLA element, warranting summary judgment in its favor. The Government should be required to contribute to the costs of remediating the Sites.

C. The Government is an “Operator” under CERCLA.

The Government qualifies as an “operator” under CERCLA based on its complete control over the chromium industry and the NPR chromium chemicals manufacturing plant during the Wars. The Government satisfies the standard under the Third Circuit and other jurisdictions as well. As a result, summary judgment is appropriate.

The Government will be liable for the environmental violations of another corporation if there is evidence that it exercised “substantial control” over the other corporation. *See FMC Corp. v. U.S. Dep’t of Commerce*, 29 F.3d 833, 843 (3d Cir. 1994). Substantial control requires “active involvement in the activities” of the other corporation. *Id.* As discussed above, a court’s consideration of circumstantial evidence, particularly given a vast passage of time, is entirely appropriate in the CERCLA context and can support a liability finding. *See Niagara Mohawk Power Corp.* and *Franklin County Convention Facilities Auth.*, *supra*.

When suing the Government under CERCLA “operator” liability, courts have considered factors, such as whether the Government: determined which product the facility would manufacture; controlled the price and supply of raw materials; supplied equipment for use in connection with the manufacturing process; worked to ensure an adequate labor force, or participated in the

management and supervision of the labor force; and controlled the price and end consumers of the product at issue. *See, e.g., FMC, supra*, 29 F.3d at 943.

These factors are present here and support a finding of Government liability. For example, the Government controlled the price of NPR's product, who NPR could sell the product to, and how the product was manufactured at NPR's facility. SOF ¶¶ 39-48, 59, 81, 84, 112. The Government also controlled the price and supply of raw materials, including both chromium ore and soda ash. SOF ¶¶ 23, 39-48, 60. The Government ensured that NPR's product was being utilized for wartime production and "suggested" that it operate seven days a week despite the labor shortages NPR was facing. SOF ¶¶ 115, 124.

The Third Circuit Court of Appeals performed a CERCLA "operator" analysis in *FMC* which is instructive in this matter. It was observed that the Government, in the World War II era, had determined that the United States required increased production of certain chemicals to manufacture war-related products. As a result, it commissioned what was then known as American Viscose (Viscose) to convert its plant to make high tenacity rayon. *Id.* at 835.

As is the case with NPR in this matter, the Third Circuit in *FMC* noted that the Government's increase of Viscose's rayon production lead to a predominant increase in the generation and disposal of hazardous waste at the plant site. *See id.* at 838. After the EPA sought to recover response costs from FMC for site

remediation, FMC filed a CERCLA lawsuit against the Government, claiming it was liable as an operator of Viscose's plant. *See FMC*, *supra*, 29 F.3d at 834-36.

The FMC Court determined that the Government was liable for Viscose's environmental violations, given evidence that the Government exercised "substantial control" over Viscose. *See id.* at 843.

The Court first highlighted that Viscose "did what the United States ordered it to do." *Id.* at 844. Second, although the United States' officials and employees personally did not take over the Viscose Plant, the Court noted that the Government maintained a significant degree of control over the production process through "regulations, on-site inspectors, and the possibility of seizure." *See id.* In addition, the Court observed that the United States "built or had built plants supplying raw materials to Viscose, controlled those plants, arranged for an increased labor force, and supervised employee conduct, at least to the extent of helping Viscose deal with labor disputes and worker absenteeism." *See id.* The Government supplied machinery and equipment for use in the manufacturing process and further exerted control over product marketing and price. *See id.*

In this case, as in *FMC*, the Government exerted substantial control over the operations of NPR. During the Wars, the chromium chemicals industry in the United States consisted of five producers and six plants. SOF ¶ 19. The Government controlled the essential raw material without which the chrome

chemicals manufacturers could not operate: chrome ore; specifically, chemical grade chrome ore. The Government, through its Agent - the Metals Reserve Company, acquired all available chrome ore and enacted orders that prohibited its private purchase. *See* SOF ¶¶ 42, 59, 81. Legislation was enacted to further tighten controls on ore pricing and the prices that producers could obtain for their products. *See* SOF ¶¶ 23-48.

Multiple military and government agencies monitored all aspects of the operations at these plants on a daily basis. *See, e.g.*, SOF ¶¶ 115, 125. The Government conducted plant inspections and exerted control over the resolution of labor strikes by applying pressure to contractors to accept labor demands for increased wages. SOF ¶¶ 68-77. It even seized one of the five plants (20% of the chromium industry) and took over its operation when a strike was not resolved quickly enough to satisfy military concerns. SOF ¶ 69. The Government also changed NPR's normal plant manufacturing processes in order to increase production output by controlling shipping schedules, ore supply delivery schedules, and even affected change in ore delivery points from those established by contractors, which caused the contractors to suffer additional shipping costs or face a withholding of ore supply from the Metals Reserve Company. SOF ¶¶ 45, 64, 83-103.

The Government caused increases in waste generation through its demands for greatly increased output during WWI and WWII and by altering NPR's production process by eliminating the rework of waste mud back into the manufacturing process, as well as by directing the on-site and outdoor disposal of the hazardous mud at the Sites. SOF ¶¶ 89-99, 104-107.

Since *FMC*, some courts have taken a distinct, but similar, approach to evaluating operator liability. Such courts have held an operator to be "someone who directs the workings of, manages, or conducts the affairs of a facility." *See, e.g., United States v. Bestfoods*, 524 U.S. 51, 66 (1998). For such activities to subject one to CERCLA operator liability, the operator must "manage, direct, or conduct operations specifically related to the pollution, that is, operations having to do with the leakage or disposal of hazardous waste, or decisions about compliance with environmental regulations." *Litgo New Jersey Inc. v. Comm'r New Jersey Dep't of Env'tl. Prot.*, 725 F.3d 369, 381 (3d Cir. 2013). "[C]ourt[s] must examine the degree of control the alleged owner/operator was able to exert over the activity causing the pollution." *United States v. Cornell-Dubilier Elecs., Inc., supra*, 2014 WL 4978635 at *8.

As discussed above, the Government exercised significant control over the chromium processing industry and, specifically, NPR's plant. This control directly resulted in the generation and disposal of the hazardous wastes that PPG now seeks

contribution from the Government for the cost of remediating. The Government controlled the manufacture of sodium bichromate, the price of the ore, as well as the price of the finished product, the quantity of ore that could be purchased, the frequency of delivery, as well as shipping methods and delivery points which affected final delivery cost. SOF ¶¶ 23-48, 50-67. The Government seized the plant of one producer, thus sending a clear message to the others. SOF ¶ 69. It also directed process changes that greatly increased the volume of waste generated at the NPR Plant, controlled resolution of employee strikes between contractors and their employees by applying pressure to producers to accept employee increased wage demands, and directed where waste would be disposed of at the Site. SOF ¶¶ 68-77, 83-103, 105-107.

Given its significant and sustained control of NPR during the Wars, the Government qualifies as an operator under CERCLA. There are no living witnesses with first-hand knowledge of the events at issue which could serve to create issues of fact as to the interpretation of the documentary record. Accordingly, summary judgment on the issue of the Government's liability is appropriate at this time.

D. The Government is an “Arranger” under CERCLA.

The Government also qualifies as an “arranger” under CERCLA. The Government not only controlled NPR's production of chromium materials, it also

controlled the company's waste management, and arranged for the disposal of chromium wastes generated from NPR's production process. As an arranger, the Government must be compelled to contribute to the cleanup costs which PPG has incurred, and will continue to incur, at the Sites.

The Government's control over the supply and use of raw materials in order to drastically increase NPR's product volumes caused an increase in waste production greater than any other time in NPR's history. SOF ¶ 110. During WWI, raw material embargoes established by the Government caused NPR to change its primary product from potassium bichromate to sodium bichromate. SOF ¶¶ 10, 50-53. The Government's greatly increased production demands necessitated NPR's purchase of land for waste disposal in 1915. SOF ¶ 109.

During WWII, the demand for chrome chemicals eclipsed the Government's WWI requirements. The Government's modification of NPR's manufacturing process resulted in a much larger volume of waste containing higher levels of toxic hexavalent chromium. SOF ¶¶ 109-110, 116, 121, 123. The Government subsidized NPR's process modification by purchasing the waste and directed NPR to store the waste outside at the Sites. SOF ¶¶ 83-103, 110.

CERCLA defines an arranger as "any person who by contract, agreement, or otherwise arranged for disposal or treatment, or arranged with a transporter for disposal or treatment, of hazardous substances owned or possessed by such person

...” 42 U.S.C. § 9607(a)(3). “... [A]n entity may qualify as an arranger under § 9607(a)(3) when it takes intentional steps to dispose of a hazardous substance.” *Burlington, supra*, 556 U.S. at 611. “... [I]n some instances an entity's knowledge that its product will be leaked, spilled, dumped, or otherwise discarded may provide evidence of the entity's intent to dispose of its hazardous wastes...” *Id.* at 612. Significantly, courts have held that, “[a]rranger liability is to be construed ‘broadly’ so as to fairly capture individuals responsible for contamination.” *See, e.g., Virginia St. Fidelco, L.L.C. v. Orbis Prod. Corp.*, 2016 WL 4150747, at *4 (D.N.J. Aug. 3, 2016) (*citing Morton, supra*).

Factors to be considered in determining arranger liability include: “(1) ownership or possession [of the hazardous substance]; and (2) knowledge; or (3) control [of it].” *Morton, supra*, 343 F.3d at 677. Ownership or possession of the hazardous substance must be demonstrated, and a plaintiff must also demonstrate either control over the process that results in a release of hazardous waste, or knowledge that such a release will occur during the process. *Id.* Courts must not lose sight of the purpose of CERCLA when evaluating arranger liability, which is to determine whether a defendant is sufficiently responsible for hazardous-waste contamination so that it can fairly be forced to contribute to the costs of cleanup. *See id.* at 677-78.

All of these factors are present in this case. The Government owned or possessed the waste disposed of at the Sites, had control over NPR's process that led to the generation of such wastes, and had knowledge that such wastes would create a release to the environment.

Here, as part of NPR's subsidy arrangement with the Government, the Government purchased the waste disposed of at the Sites such that NPR could modify its process to increase its production for the War effort. SOF ¶¶83-103, 111-117. In fact, the Government directed NPR to generate more output of sodium bichromate by eliminating the rework of waste mud, resulting in increased waste generation. *Id.* The Government's control over NPR's process and production volume resulted in the generation and disposal of waste at the Sites. *Id.*

Thus, the Government owned and possessed the waste disposed of at the Sites by reason of its subsidy arrangement with NPR and its complete control over the raw materials utilized by NPR, its complete control of NPR's process, as well its knowledge of the inherent hazardous nature of the waste disposed of at the Sites. *See* SOF ¶¶ 49-67, 83-101, 104-117. The United States was found liable as an arranger under CERCLA in *Cadillac Fairview/California, Inc. v. Dow Chemical Co.*, 299 F.3d 1019 (9th Cir. 2002). In *Cadillac*, the United States was aware that a direct byproduct of an essential wartime product was a pollutant, and

to advance military objectives, it directed the disposal of those toxic wastes that later resulted in remediation efforts at a substantial cost. *Id.* at 1024-25.

Like the United States in *Cadillac*, the Government in this matter was fully aware of the waste generation inherent in the chrome chemicals process it mandated NPR to follow. The Government directed studies of different manufacturing processes, and controlled the manufacturing process NPR employed in producing essential war time material. SOF ¶ 113. The Government was also fully aware of the waste byproduct's impact on the health of workers - even going so far as to acknowledge that such health effects made it difficult to provide manpower for the industry. SOF ¶ 114.

The Government was onsite at the NPR plant and worked to determine how best to increase production for its benefit. SOF ¶ 115. During the Government's numerous visits to NPR's plant, the United States observed the waste piles and obtained undeniable knowledge of the volume of waste stored at the Sites. SOF ¶¶ 115-116. The mountainous waste piles at NPR – almost 70 feet high in 1944, which grew to 88 feet high by 1947 - could be seen from miles away and were immediately apparent to any visitor to the Plant, including the Government inspectors who inspected NPR's operations. SOF ¶¶ 116-117, 122.

In *Litgo N.J., Inc. v. Bob Martin, et al.* 2010 WL 2400388 (D.N.J. June 10, 2010) (*aff'd in part, rev. in part, Litgo N.J., Inc. v. Bob Martin, et al.* 725 F.3d 369

(3d Cir. 2013), plaintiffs brought CERCLA and RCRA claims against numerous entities, including the United States, relative to TCE, PCE and other contamination. *See id.* at 1. The Court found that the United States had “generated and arranged for the disposal of hazardous wastes” which ended up at the site, a warehouse which previously stored containers with PCE and TCE which originated from the United States military. Though not found to be an “owner” of hazardous substances disposed of at the site, the United States was found to have “arranged for the disposal” of the drums and containers. *See id.* at 26.

The Court rejected the Government’s proposition that it had merely arranged for the “storage” rather than the “disposal” of the materials at the warehouse. In rejecting that distinction, the Court acknowledged the established inquiry of whether “the hazardous materials were ‘disposed of’ in the sense that the materials were considered waste and were thrown out, got rid of or dumped.”” *See id.* (citing *Prudential Ins. Co. v. United States Gypsum Co.*, 711 F.Supp 1244, 1253 (D.N.J. 1989)). Accordingly, the Court ruled that plaintiff established the casual link between the United States and the contamination at the site. *See id.* at 31.

As in *Litgo*, PPG has established a causal link between the United States and the contamination at the Sites. The Government in this case directed that NPR increase production volume, thereby increasing waste output. SOF ¶¶ 26, 36, 49, 54, 78, 87, 99. The Government further directed NPR to modify its process to

eliminate the normal rework of waste, and subsidized NPR's increased waste generation by purchasing the waste disposed of at the Sites. SOF ¶¶ 111-123. In addition, the Government determined that outside storage at the Sites was the only possible method of disposal. SOF ¶¶ 104-108; 121-123.

As an arranger of the hazardous waste at issue, the Government must be compelled to contribute to the remediation costs PPG has and will continue to expend in the future.

E. PPG has Incurred Response Costs that are Consistent with the National Contingency Plan.

To date, PPG has incurred over \$361 million dollars in necessary response costs remediating the contamination at the Sites. SOF ¶ 147. Given the Government's CERCLA liability, and that PPG's response costs are consistent with the National Contingency Plan (NCP), the Government must contribute its equitable share of the responsive costs incurred by PPG to cleanup the Sites.

In 1990, the EPA revised the NCP provision concerning the determination of whether a private party has acted consistently with the Plan in carrying out cleanup activities. *See* 55 Fed. Reg. 8666. In so doing, the EPA reduced the standard for a private party's compliance from "strict" to "substantial compliance." *See id.* at 8793; *see also* 40 C.F.R. § 300.700(c)(3)(i). Given this revision, a party's

“immaterial or insubstantial” deviations do not result in actions being inconsistent with the NCP. *See* 40 C.F.R. § 300.700(c)(4).

The 1990 amendments to the NCP were intended to encourage private party cleanups. It was expressly recognized that, “providing a list of rigid requirements may serve to defeat cost recovery for meritorious cleanup actions based on a mere technical failure by the private party that has taken the response action.” *See* 55 Fed. Reg. at 8793 (1990).

Under the NCP, “a private party response action will be considered ‘consistent with the NCP’ if the action, when evaluated as a whole, is in *substantial compliance* with the [NCP] and results in a CERCLA-quality cleanup.” 40 C.F.R. § 300.700(c)(3)(i) (emphasis added). Responsible parties “shall be liable for necessary costs of response actions to releases of hazardous substances incurred by any other person consistent with the NCP. *See* 40 C.F.R. § 300.700(c)(2); *see also Hatco Corp. v. W.R. Grace & Co. Conn.*, 849 F. Supp. 931, 961 (D.N.J. 1994). Courts evaluate the “responding party’s costs ‘against the NCP in force at the time that such costs were incurred.’” *Id.* (citations omitted). Given that PPG’s response actions were taken after July 1990, and continue to this date, the versions of the NCP promulgated in 1990, and later revised in 1994, govern the evaluation of PPG’s costs in this matter.

Our courts have held that there is an “irrebuttable presumption of consistency with the NCP when a private-party response action is carried out in compliance with the terms of an EPA order or consent decree.” *United States v. Kramer*, 644 F. Supp. 2d 479, 490 (D.N.J. 2008) (internal citations omitted).

While PPG’s compliance with the NCP is presumed based on the case law and its compliance with the consent orders and judgments with the NJDEP, the specific actions PPG took to remediate the Sites are consistent with the NCP. *See* Cert. of Joseph F. Lagrotteria, at Exhibit ¶ 105, October 7, 2016, Expert Report of Stephen A. Johnson, P.E., at 43-44.

Actions consistent with the NCP fall into one of two categories: those that are remedial actions and those that are removal actions. Distinguishing between these is relevant to the “substantial compliance” analysis, in that the NCP delineates compliance requirements relative to these action categories. In general, “Removal” actions consist of “time-sensitive responses” to public health threats, and “remedial” actions are generally regarded as “permanent remedies to threats for which an urgent response is not warranted.” *W.R. Grace, supra*, 429 F.3d at 1227-28.

PPG has entered into multiple consent orders with the NJDEP concerning the remediation of the Sites as well as a federal consent decree with the NRDC. SOF ¶¶ 141-142. The consent orders and consent decree mandate that PPG

remediate the Sites in very specific ways, including setting forth the standards that the Sites must be remediated to. *Id.*

a. PPG has substantially complied with the relevant provisions of the NCP, including 40 C.F.R. § 300.700(c)(5) which concerns voluntary, private remediating parties, such as PPG.

Paragraph 5 of the NCP sets forth “potential applicable” provisions related to response and removal actions undertaken by private persons, such as PPG.⁹ PPG’s remedial and removal actions comply with Paragraph 5 of the NCP (40 C.F.R. § 300.700(c)(5).) PPG has performed multiple remedial and removal actions, including but not limited to interim remedial measures (IRMs) during the

⁹40 C.F.R. § 300.700(c)(5) includes: 40 C.F.R. § 300.700(c)(5)(i) – Section 300.150 (on worker health and safety); 40 C.F.R. § 300.700(c)(5)(ii) – Section 300.160 (on documentation and cost recovery); 40 C.F.R. § 300.700(c)(5)(iv) – Section 300.405(b), (c), and (d) (on reports of releases to the NRC); 40 C.F.R. § 300.700(c)(5)(v) – Section 300.410 (on removal site evaluation); 40 C.F.R. § 300.700(c)(5)(vi) – Section 300.415 (on removal actions - including § 300.415(j) with regard to meeting ARARs where practicable, except that private party removal actions must always comply with the requirements of applicable law); 40 C.F.R. § 300.700(c)(5)(vii) – Section 300.420 (on remedial site evaluation); 40 C.F.R. § 300.700(c)(5)(viii) – Section 300.430 (on RI/FS and selection of remedy - except paragraph (f)(1)(ii)(C)(6) and that applicable requirements of federal or state law may not be waived by a private party); and 40 C.F.R. § 300.700(c)(5)(ix) – Section 300.435 (on Remedial design and remedial action and operation and maintenance). Sections 300.150, 300.160, and 300.400, governing remedial and removal actions, combined, while Sections 300.410 and 300.415 govern removal actions, and Sections 300.420, 300.430, and 300.435 govern remedial actions only. In addition, Section 300.150 provides that “in a response action taken by a responsible party, the responsible party must assure that an occupational safety and health program is made available for the protection of workers at the response site.” *See* 40 C.F.R. § 300.150.

1990s at the Sites; emergency groundwater pumping activities in 2004-2005; as well as the July 2010-June 2011 IRM #1 at Site 114. SOF ¶ 145.

PPG's actions were directed and approved by the NJDEP, and were guided by State actions resulting out of litigation, such as the 1990 Consent Order and the 2009 JCO, as well as a federal litigation with the NRDC which resulted in a Consent Decree. SOF ¶¶ 141-142. These Consent Orders and Decrees established the baseline framework by which PPG was required to evaluate and comply with the applicable or relevant and appropriate requirements (ARARs). *Id.*; *see also* Cert. of Joseph F. Lagrotteria at Exhibit ¶ 105, Expert Report of Stephen A. Johnson, P.E., at 19-20, 34-43.

In addition, PPG worked over the course of many years to develop a Feasibility Study, which upon direction of the State of New Jersey was never finalized, moving in 2010 to the remediation method preferred by the State and the Public, excavation of impacted soils and other contaminated media. SOF ¶ 145.

Section 300.160 of the NCP ("Documentation and cost recovery") states that:

[d]uring all phases of response, the lead agency shall complete and maintain documentation to support all actions taken under the NCP and to form the basis for cost recovery. In general, documentation shall be sufficient to provide the source and circumstances of the release, the identity of responsible parties, the response action taken, accurate accounting of federal, state, or private party costs incurred for response actions, and impacts and potential impacts to the public health and welfare and the environment. Where applicable,

documentation shall state when the NRC received notification of a release of a reportable quantity.

40 C.F.R. § 300.160.

Again, PPG has compiled with this NCP element by maintaining a public repository of regulatory submittals, submitting remedial investigation, remedial action work plans, progress reports and other technical documents to the NJDEP for comment and approval-all of which document the work performed by PPG at the Sites, and by maintaining an accurate accounting of costs incurred by PPG. SOF ¶¶ 148-154.

b. PPG has substantially complied with Paragraph 6 of the NCP (40 C.F.R. § 300.700(c)(6)).

Paragraph 6 (40 C.F.R. § 300.700(c)(6)) governs potentially applicable public comment requirements.¹⁰ In accordance with the NCP, “[a]ny response action carried out in compliance with the terms of . . . a consent decree entered into pursuant to section 122 of CERCLA, will be considered ‘consistent with the NCP.’” 40 C.F.R. § 300.700(c)(3)(ii).

¹⁰ Paragraph 6 of the NCP includes: 40 C.F.R. § 300.700(c)(6)(i) – Section 300.155 (on public information and community relations); 40 C.F.R. § 300.700(c)(6)(ii) – Section 300.415(n) (on community relations during removal actions); 40 C.F.R. § 300.700(c)(6)(iii) – Section 300.430(c) (on community relations during RI/FS - except paragraph (c)(5)); 40 C.F.R. § 300.700(c)(6)(iv) – Section 300.430(f)(2), (3), and (6) (on community relations during selection of remedy); and 40 C.F.R. § 300.700(c)(6)(v) – Section 300.435(c) (on community relations during RD/RA and operation and maintenance).

Paragraph 6 of the NCP provides that, “[p]rivate parties undertaking response actions *should* provide an opportunity for public comment concerning the selection of the response action based on the provisions set out below, or based on substantially equivalent state and local requirements...” (emphasis added). Courts interpreting this Section of the NCP have noted that, “[t]he use of the word ‘should’ suggests that adherence to the specific provisions identified is encouraged though not mandatory.” *See, e.g., Bd. of County Com'rs of County of La Plata, Colorado v. Brown Group Retail, Inc.*, 768 F. Supp. 2d 1092, 1116–17 (D. Colo. 2011) (citations omitted).

Courts have held that, in order for a party to substantially comply with the “public participation” element of the NCP, “(1) there must be sufficient oversight—either by the public or by a government agency charged with protecting the public environmental interest—to protect the public's shared interest in an ‘environmentally sound’ cleanup; and (2) parties who might foreseeably be affected by the private party's decisions must be given a meaningful opportunity to participate in them.” *Aviall Services, Inc. v. Cooper Industries, LLC*, 572 F. Supp. 2d 676, 693-94 (N.D. Tex. 2008).

There are two identified underlying purposes for the NCP’s public participation requirement: “first, to ensure that PRPs and concerned citizens ‘that may [be] affect[ed]’ by cleanup decisions are able to represent their interests; and

second, to ensure that cleanups ‘performed without governmental supervision’ are carried out in an ‘environmentally sound’ manner.” *See Aviall, supra*, 572 F. Supp. 2d at 692 (*citing* 55 Fed. Reg. at 8795).

PPG has substantially complied with the public participation requirement of the NCP. See Cert. of Joseph F. Lagrotteria, Esq. at ¶ 105, October 7, 2016 Expert Report of Stephen A. Johnson, P.E., at 39-42.

Detailed documentation of PPG’s investigations, remedial and removal actions were maintained by both the NJDEP and PPG. SOF ¶¶ 146, 151-154. In addition, the NJDEP maintained a separate, public-facing website for the chromium sites, while PPG also operated a website dedicated to the cleanup project - posting public notices including scheduled public participation meetings, proposed work, submissions to the NJDEP and work completion and milestones. SOF ¶ 151.

PPG also maintains a document repository in Jersey City which is open to the public for in-person review. SOF ¶ 152. Public notices of proposed work were additionally published in local newspapers. SOF ¶ 153. The NJDEP also took control of public notice responsibilities, taking the lead in requesting public comment and setting public comment periods. SOF ¶ 154.

PPG has substantially complied with the NCP. As a result, summary judgment should be entered in PPG's favor and an order entered compelling the Government to contribute to the remediation costs.

III. The Government is also Liable Pursuant to the Resource Conservation and Recovery Act.

In addition to being a liable party under CERCLA for its war time control over the chromium industry and the NPR plant, the Government is also liable under the Resource Conservation and Recovery Act, 42 U.S.C. § 6901, *et seq.* (RCRA). PPG meets all the elements of RCRA entitling it summary judgment, to an order compelling the Government to contribute to PPG's cleanup costs, as well as for PPG's counsel fees.

RCRA was enacted "to reduce the generation of hazardous waste and to ensure the proper treatment, storage, and disposal of that waste which is nonetheless generated." *Litgo, supra*, 725 F.3d at 393 (internal citation omitted). RCRA provides that "any person may commence a civil action on his own behalf . . . against any person (including (a) the United States. . . who has contributed or who is contributing to the past or present handling, storage, treatment, transportation, or disposal of any solid or hazardous waste which may present an imminent and substantial endangerment to health or the environment..." 42 U.S.C. § 6972(a)(1)(B). To prevail under this section, a plaintiff must show that:

(1) that the defendant is a person, including, but not limited to, one who was or is a generator or transporter of solid or hazardous waste or one who was or is an owner or operator of a solid or hazardous waste treatment, storage, or disposal facility;

(2) that the defendant has contributed to or is contributing to the handling, storage, treatment, transportation, or disposal of solid or hazardous waste; and

(3) that the solid or hazardous waste may present an imminent and substantial endangerment to health or the environment.

Interfaith Cmty Org. v. Honeywell Int’l, Inc., 399 F.3d 248, 258 (3d Cir. 2005).

RCRA sets forth statutory definitions for the terms “solid waste” and “hazardous waste.” RCRA defines “solid waste” as:

[A]ny garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under section 1342 of Title 33, or source, special nuclear, or by product material as defined by the Atomic Energy Act of 1954, as amended (68 Stat.923).

42 U.S.C. § 6903(27). Under RCRA, “hazardous waste” is defined as:

[A] solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may—

(A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or

(B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

42 U.S.C. § 6903(5). Both PPG and the Government agree that the chromium wastes which have been identified at the Sites, including CCPW, are hazardous wastes. *See* the Government’s December 19, 2012, Counterclaim, ECF 19 at ¶¶ 15, 140.

The chromium wastes at the Sites, which PPG is currently remediating, pose an imminent and substantial endangerment to a person and the environment. An “imminent and substantial endangerment exists if there is ‘reasonable cause for concern that someone or something may be exposed to a risk of harm if remedial action is not taken.’” *Interfaith, supra*, 263 F. Supp. 2d at 836 (citation omitted).

As observed by the Third Circuit Court of Appeals, the “unequivocal statutory language” of RCRA, as well as its legislative history, makes it clear that RCRA is “intended to confer upon the courts the authority to grant affirmative equitable relief to the extent necessary to eliminate any risks posed by toxic wastes.” *See United States v. Price*, 688 F.2d 204, 213-14. It has also been noted that courts should “recogniz[e] that risk may be assessed from suspected, but not completely substantiated, relationships between imperfect data, or from probative preliminary data not yet certifiable as fact.” *Interfaith, supra*, 399 F.3d at 260 (citation omitted).

Significantly, RCRA does not require a showing of actual harm, but only “threatened or potential harm.” *Id.* at 258 (internal citation omitted). The endangerment must be “imminent,” meaning that it “threaten[s] to occur immediately[,]” although “the impact of the threat may not be felt until later.” *Meghrig v. KFC Western, Inc.*, 516 U.S. 479, 486 (1996) (citation omitted).

Notably, in *Interfaith*, while observing that the NJDEP had set remediation or clean-up standards as to chromium, Judge Cavanaugh found that chromium waste exceeding New Jersey standards presented an “imminent and substantial endangerment to health and the environment” sufficient to find liability under RCRA. *See Interfaith, supra*, 263 F.Supp.2d at 815.

Similarly, at the Sites, the chromium wastes and associated contaminants have been measured as exceeding New Jersey cleanup standards. SOF ¶ 140. The waste generated at the NPR Plant while it was under the Government’s control poses an imminent and substantial endangerment to the environment and to persons. *See* Cert. of Joseph F. Lagrotteria, ¶ 101, 1990 Administrative Consent Order, ¶ 4. Thus, the chromium wastes and related chemical substances at the Sites meet the statutory definition of hazardous waste.

In assessing the Government’s RCRA liability, this Court can look to the District of New Jersey case *Litgo N.J., Inc. v. Bob Martin*, No. 06–2891 AET, 2010 WL 2400388 (D.N.J. June 10, 2010), *aff’d in part and vacated in part on*

other grounds sub nom., Litgo N.J. Inc. v. Comm'r N.J. Dep't of Env'tl. Protection, 725 F.3d 369 (3d Cir. 2013).

In *Litgo*, plaintiffs brought CERCLA and RCRA claims against numerous entities, including the United States, relative to TCE, PCE and other contamination at former manufacturing operations at a Somerville, New Jersey site associated with Columbia Aircraft, Inc. in the 1940s, as well as the subsequent warehousing and negligent cleanup of hazardous materials at the property. *See id.* at 1.

The Court found that the United States had “generated and arranged for the disposal of hazardous wastes” which ended up at the site, a warehouse which previously stored containers with PCE and TCE which originated from the United States military. Though not found to be an “owner” of hazardous substances disposed of at the site, the United States was found to have “arranged for the disposal” of the drums and containers. *See id.* at 26. Rejecting the Government’s proposition that it had merely arranged for the “storage” rather than the “disposal” of the materials at the warehouse, the Court rejected that distinction, acknowledging the established inquiry of whether “the hazardous materials were ‘disposed of’ in the sense that the materials were considered waste and were thrown out, got rid of or dumped.” *See id.* (citing *Prudential Ins. Co. v. United States Gypsum Co.*, 711 F.Supp 1244, 1253 (D.N.J. 1989)). Accordingly, the Court

ruled that plaintiff established the casual link between the United States and the contamination at the site. *See id.* at 31.

The Court found the United States to be a “person” under RCRA based on the plain statutory definition, discussed above, which identifies the United States as a “person” for liability purposes. *See id.* at *31. The Court found that the presence of the contaminants at issue may create an imminent and substantial endangerment to the environment or health due to the fact that they were present in the groundwater above the NJDEP’s maximum acceptable contaminant levels. *See id.* The sole inquiry then remaining as to the RCRA claim was whether the United States had contributed (or was contributing) to “the handling, storage, treatment, transportation, or disposal of solid or hazardous waste.” *Id.* (citation omitted). Under this final element, the Court held that the United States was liable under RCRA for the same reasons it had been found liable under Plaintiff’s CERCLA claim. *See id.*

Like the Plaintiff in *Litgo*, PPG has established a causal link between the Government and the disposal of the hazardous chromium waste at the Sites. Here, the WPB proposed the purchase of approximately 4,000 tons per month of sludge “...containing approximately 12% Cr_2O_3 at approximately \$5.00 per net ton delivered to dump. [T]his would merely offset the cost arising from inefficient extraction of ore and would in no way increase Natural’s present profits or reduce

any losses they are now sustaining.” SOF ¶ 105. This was the Government’s chosen method of disposal for the waste sludge at the NPR Site. SOF ¶¶ 105-107, 121-123.

PPG has established each element under RCRA which compels an injunction requiring the Government to participate in the cleanup of the Sites. As there are no genuine issues of material fact in dispute, summary judgment is appropriate and must be granted.

IV. The Government’s Counterclaim Should also be Dismissed on Summary Judgment.

The Government has asserted a contribution claim against PPG under Section 113 of CERCLA. Unless the Government is conceding that it is a potentially responsible party in this matter—warranting the granting of PPG’s instant Motion—the Government is not in a position to pursue this counterclaim against PPG as it does not plead the requisite elements of CERCLA liability. A fatal flaw in the Government’s contribution counterclaim is its failure to prove that it has incurred costs consistent with the National Contingency Plan. As such, the Government’s counterclaim against PPG should be dismissed.

“PRPs may seek contribution from other [potentially responsible parties] PRPs—including the party that originally brought the § 107(a) action—under

CERCLA § 113(f).” *Litgo.*, *supra*, 725 F.3d at 379 (citations omitted); *see also United States v. Atl. Research Corp.*, 551 U.S. 128, 138–39 (2007).

Section 113 of CERCLA provides a form of relief separate from that of Section 107. “[T]he remedies available in §§ 107(a) and 113(f) complement each other by providing causes of action to persons in different procedural circumstances.” *Agere Systems*, *supra*, 602 F.3d at 218 (internal quotations and citations omitted). As recognized by the Third Circuit Court of Appeals in *Agere*:

Section 113(f) specifically is a second means of recouping cleanup costs, and it, in turn, provides two avenues of relief. Under § 113(f)(1), a PRP can seek contribution from another PRP during or following a CERCLA suit brought against the first PRP.... Likewise, under § 113(f)(3)(B), PRPs who resolve their liability to the United States or an individual State through an administratively or judicially approved settlement can seek contribution from another PRP.

Id. at 217 (citations omitted).

Unless the Government is conceding that it is now a PRP under CERCLA, based on PPG’s operator and arranger arguments above, it is not in a position to pursue a CERCLA contribution claim against PPG under Section 113. In order to proceed with such claim, the Government must be a PRP and also have incurred cleanup costs consistent with NCP. The Government simply has not proven or asserted that it has incurred costs to clean up the Sites at issue in this case.

Accordingly, should the Court interpret this Counterclaim as a concession by the Government of its CERCLA liability, PPG's Motion for Summary Judgment should be granted, and an allocation hearing should be scheduled to determine the Government's appropriate share of response costs. Should this not be the case, the Government's Counterclaim must be dismissed as a matter of law.

CONCLUSION

It is respectfully submitted that there is no dispute as to the Government's pervasive control of NPR's operations and its arrangement of hazardous wastes at the Sites during the Wars. Accordingly, PPG's Motion for Summary Judgment must be granted, the Government's Counterclaim must be dismissed, and a hearing set to determine the Government's equitable allocation of response costs.